



KERN OBL-12 · 13 Compound Microscopes User Manual

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KERN®

OPTICS

KERN OPTICS CATALOGUE 2022
Compound microscopes KERN OBL-12 · 13



Trinocular version



Simple polarising
attachment

LAB LINE

The flexible laboratory assistant with infinity optical system and fixed, pre-centred Koehler illumination

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Features

- The OBL series stands out through its infinity optical unit and is therefore ideally suited for all demanding transmitted illumination applications. The robust and ergonomic stand base guarantees safe and comfortable working
- Depending on the application, there is a choice of models with strong, continuously dimmable 3 W LED or 20 W halogen illumination (Philips)
- The fixed, pre-centred and focusable 1,25 Abbe condenser with aperture diaphragm and field diaphragm gives you a simplified Koehler illumination, without having to move the centre
- The large mechanical stage and its specimen holder holds up to two samples at the same time and is quick and easy to focus using a coaxial coarse and fine focusing knob on both sides
- A large selection of eyepieces, objectives and colour filters as well as a darkfield condenser, a simple polarising unit, different phase contrast kits through to HBO and LED fluorescence units are available to you as accessories
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery
- A C-mount adapter is required to connect a camera to the trinocular version. You can select this adapter from the following model outfit list
- Please find detailed information in the following model outfit list

Scope of application

- Haematology, urology, gynaecology, dermatology, pathology, microbiology and parasitology, immunology, oncology, entomology, vets, water analysis and breweries

Applications/Samples

- Translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue)

Technical data

- Infinity optical system
- Quadplex nosepiece

- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 395×200×380 mm
- Net weight approx. 6,7 kg

STANDARD



OPTION



Model KE RN	Standard configuration				
	Tube	Eyepiece	Objective quality	Objectives	Illumination
OBL 125*	Binocular	HWF 10x/0 20 mm	Infinity E-Plan	4x/10x/40x/100x	20 W Halogen (transmitted)
OBL 127	Binocular	HWF 10x/0 20 mm	Infinity E-Plan		3 W LED (transmitted)
OBL 135*	Trinocular	HWF 10x/0 20 mm	Infinity E-Plan		20 W Halogen (transmitted)
OBL 137	Trinocular	HWF 10x/0 20 mm	Infinity E-Plan		3 W LED (transmitted)

* ONLY WHILE STOCKS LAST

Model outfit		Model KERN				Order number
		OBL 125	OBL 135	OBL 127	OBL 137	
Eyepieces (23, 2 mm)	HWF 10x/0 20 mm	✓✓	✓✓	✓✓	✓✓	OBB-A1404
	WF 16x/0 13 mm	○	○	○	○	OBB-A1354
	HWF 10x/0 20 mm (with Pointer)	○	○	○	○	OBB-A1448
	4x/0,10 W.D. 12,1 mm	✓	✓	✓	✓	OBB-A1161
	10x/0,25 W.D. 2,1 mm	✓	✓	✓	✓	OBB-A1159
	40x/0,65 (spring-loaded) W.D. 0,58 mm	✓	✓	✓	✓	OBB-A1160
















Infinity E-Plan objectives	100x/1,25 (oil) (spring-loaded) W.D. 0,19 m m	✓	✓	✓	✓	OBB-A1158
	Plan 20x/0,40 (spring-loaded) W.D. 2,41 mm	○	○	○	○	OBB-A1250
	Plan 60x/0,80 (spring-loaded) W.D. 0,33 mm	○	○	○	○	OBB-A1270
	Plan 100x/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	OBB-A1437
Binocular tube	<ul style="list-style-type: none"> • Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 -75 mm (for infinity system) • Diopter adjustment: One-sided 	✓	○	✓	○	OBB-A1578
Trinocular tube	<ul style="list-style-type: none"> • Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 -75 mm • Light distribution 20:80 (for infinity system) • Diopter adjustment: One-sided 	○	✓	○		OBB-A1580
Mechanical stage	<ul style="list-style-type: none"> • Stage size WxD 145x 130 mm • Travel 76x52 mm • Coaxial coarse and fine focusing knobs, scale: 2 µm • Two slide holder 	✓	✓	✓	✓	
Condenser	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	✓	✓	OBB-A1103
Darkfield condenser	N.A. 0,85-0,91 (dry, paraboloid)	○	○	○	○	OBB-A1422
Illumination	20 W Halogen spare bulb (transmitted)	✓	✓			OBB-A1370
	3 W LED illumination system (transmitted) (non-rechargeable)			✓	✓	
Polarising unit	Analyser/Polariser	○	○	○	○	OBB-A1277
Phase contrast units (including PH-condenser and PH-slides)	Single unit with 3 PH-Plan objective 10x	○	○	○	○	OBB-A1215
	Single unit with 3 PH-Plan objective 20x	○	○	○	○	OBB-A1217
	Single unit with 3 PH-Plan objective 40x	○	○	○	○	OBB-A1219
	Single unit with 3 PH-Plan objective 100x	○	○	○	○	OBB-A1213
	When several magnification levels are required, please contact us					
Fluorescence unit	100 W HBO Epi Fluorescence unit, three-hole slide (BIG) including centering objective	○	○	○	○	OBB-A1154
	3 W LED Epi Fluorescence unit, three-hole slide (BIG) including centering objective	○	○	○	○	OBB-A1157



















Colour filters f or transmitted illumination	Blue (built-in)	✓	✓	✓	✓	
	Green	○	○	○	○	OBB-A1188
	Yellow	○	○	○	○	OBB-A1165
	Grey	○	○	○	○	OBB-A1183
C-Mount	0,5x (focus adjustable)		○		○	OBB-A1515
	1x		○		○	OBB-A1514

✓ Included with delivery

○ Option

Pictograms

	360° rotatable microscope head		Fluorescence illumination for compound microscopes With 3 W LED illumination and filter		USB 3.0 digital camera For direct transmitting of the picture to a PC
	Monocular Microscope For the inspection with one eye		Phase contrast unit For a higher contrast		WLAN data interface For transmitting of the picture to a mobile display device
	Binocular Microscope For the inspection with both eyes		Darkfield condenser/unit For a higher contrast due to indirect illumination		HDMI digital camera For direct transmitting of the picture to a display device
	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera		Polarising unit To polarise the light		PC software To transfer the measurements from the device to a PC
	Abbe Condenser With high numerical aperture for the concentration and the focusing of light		Infinity system Infinity corrected optical system		Automatic temperature compensation For measurements between 10 °C and 30 °C

	Halogen illumination For pictures bright and rich in contrast		Zoom magnification For stereomicroscopes		Protection against dust and water splashes IPxx : The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013
	LED illumination Cold, energy-saving and especially long-life illumination		Auto-focus For automatic control of the focus level		Battery operation Ready for battery operation. The battery type is specified for each device.
	Incident illumination For non-transparent objects		Parallel optical system For stereomicroscopes, enables fatigue-proof working		Battery operation rechargeable Prepared for a rechargeable battery operation
	Transmitting illumination For transparent objects		Integrated scale In the eyepiece		Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
	Fluorescence illumination For stereomicroscopes		SD card For data storage		Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter		USB 2.0 digital camera For direct transmitting of the picture to a PC		Package shipment The time required to manufacture the product internally is shown in days in the pictogram.


Abbreviations

C-Mount	Adapter for the connection of a camera to a trinocular microscope	LWD	Long Working Distance	SWF	Super Wide Field (Field number at least Ø 23 mm for 10× eyepiece)
FPS	Frames per second	N.A.	Numerical Aperture	W.D.	Working Distance
H(S) WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	SLR camera	Single-Lens Reflex camera	WF	Wide Field (Field number up to Ø 22 mm for 10× eyepiece)

Your KERN specialist dealer:

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Documents / Resources

	<p>KERN OBL-12 · 13 Compound Microscopes [pdf] User Manual OBL-12 13 Compound Microscopes, OBL-12 13, Compound Microscopes, Microscopes</p>
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